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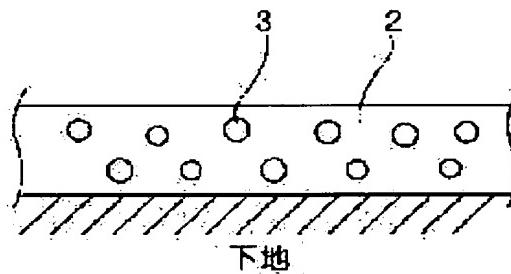
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(54) FISHING TOOL COATED WITH LUMINOUS COATING MATERIAL

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a fishing rod that is coated with a luminous coating material that makes visible an ornament drawn on its surface during the bright daytime, and in the darkness, can increase the visibility of fishing tools by its luminescence due to the coated coating material.

SOLUTION: A colorless transparent clear coating material is mixed with a curing agent and a thinner to prepare a coating material concentrate. This concentrate is mixed with a dispersant, a precipitation inhibitor and a luminous material to give the objective luminous coating material. Fishing tools are coated with the luminous coating material on their surfaces. The luminous coated layer on the surfaces of the fishing tools is in the state that fine particles of luminous material 3 are uniformly dispersed in the colorless, transparent and clear coating material layer 2.



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CLAIMS

[Claim(s)]

[Claim 1] Fishing tackle which is characterized by applying the luminous paint with which the dispersant, the sedimentation inhibitor, and the charge of phosphorescent material are mixed to the coating undiluted solution which mixed a curing agent and thinner in the transparent and colorless clear coatings on the front face of fishing tackle and by which light storage paint was carried out.

[Claim 2] For the weight of 3 and said sedimentation inhibitor, the weight of said dispersant is [said luminous paint / as opposed to / when weight of said coating undiluted solution which mixed 9% of said curing agents and said thinner 6% in 85% of said transparent and colorless clear coatings is set to 100 / the weight 100 of the coating undiluted solution concerned / the weight of 5 and said charge of phosphorescent material] the fishing tackle according to claim 1 to which it is characterized by being luminous paint currently mixed at a rate of 30-40 and by which light storage paint was carried out.

[Claim 3] Said charge of phosphorescent material is fishing tackle according to claim 1 or 2 which is characterized by fully being subdivided by the pebbles ball mill machine and by which light storage paint was carried out.

[Claim 4] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by ***** which is a beam was carried out.

[Claim 5] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by ***** which is a float was carried out.

[Claim 6] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being the guide of a fishing rod was carried out.

[Claim 7] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being a fishhook was carried out.

[Claim 8] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being false food was carried out.

[Claim 9] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being a weight was carried out.

[Claim 10] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being the balance was carried out.

[Claim 11] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being the vinyl pipe fixed to a fishing line

was carried out.

[Claim 12] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being a ball friend was carried out.

[Claim 13] Said fishing tackle is the fishing tackle by which the light storage paint of the publication in one term of claims 1-3 characterized by being a stringer was carried out.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the fishing tackle by which the coating which emits light in darkness is applied to the front face and by which light storage paint was carried out.

[0002]

[Description of the Prior Art] The so-called ornament of a "stage volume" etc. which was shown in drawing 3 (a) and (b) is given to the front face of the fishing rod 10 generally used.

[0003] Here, at ** places other than ***** places, such as a fishing pond, since the location without lighting facilities is common, in the fishing at the time of the twilight where a perimeter becomes dark, ****, etc., the visibility of a fishing rod falls remarkably. Therefore, in the fishing at the time of such twilight, ****, etc., under a certain situation, when an angler left the spot in the ground, he sometimes often trampled the fishing rod ***** and himself accidentally [fishing rod].

[0004] In order to prevent such accident, it is possible to apply the luminous paint which emits light in darkness on the surface of a fishing rod, and to raise the visibility in darkness.

[0005]

[Problem(s) to be Solved by the Invention] However, when conventional luminous paint was applied, the transparent and colorless clear coating layer (luminous paint layer) 2 with which the white coating layer 1 was formed upwards, and the charge 3 of phosphorescent material was mixed as shown in drawing 2 had to be formed. That is, the conventional charge of phosphorescent material had the object for ** applied after carrying out an under coat in white coatings. The reason is because the luminescence brightness of luminous paint falls remarkably, when not carrying out an under coat in white coatings.

[0006] Therefore, when applying conventional luminous paint to the front face of a fishing rod, an under coat will have to be carried out in white coatings, and the trouble that the ornament given to the front face of the fishing rod 10 as shown in drawing 3 will be spoiled will arise.

[0007] The purpose of this invention can check by looking the ornament given to the front face in the bright condition, and is by emitting light in darkness to offer the fishing tackle which can raise the visibility of the fishing tackle and by which light storage paint was carried out.

[0008]

[Means for Solving the Problem] In order to attain the above purpose, this invention is

characterized by applying the luminous paint with which the dispersant, the sedimentation inhibitor, and the charge of phosphorescent material are mixed to the coating undiluted solution which mixed a curing agent and thinner in the transparent and colorless clear coatings on the front face of fishing tackle.

[0009]

[Embodiment of the Invention] The operation gestalt of this invention is explained below.

[0010] First, the luminous paint used by this invention is explained in detail.

[0011] In the luminous paint concerning this invention, what mixed a curing agent and thinner in the transparent and colorless clear coatings is used as a coating undiluted solution which forms a coating layer. As a transparent and colorless clear coating, which coating of an acrylic resin system, an epoxy system, and a polyurethane resin system may be used here.

[0012] In addition to the charge of phosphorescent material, a sedimentation inhibitor and a dispersant are mixed to such a coating undiluted solution, and it considers as luminous paint. As a charge of phosphorescent material, an invention-in-this-application person can use charges of phosphorescent material, such as PIKARIKO (CP-05, CP-10) of the product made from KEMITEKKU, Inc. besides the already proposed charge of phosphorescent material (Japanese Patent Application No. 8-323365), here.

[0013] When the luminous paint concerning such this invention is applied, it is the process which thinner evaporates and the transparent and colorless clear coating dries, and maintaining the condition of having been spread in homogeneity is continued, without the particle of the charge of phosphorescent material precipitating within a coating layer according to an operation with a sedimentation inhibitor and a dispersant. Therefore, since a lot of thinner is mixable as compared with conventional luminous paint, while being able to lengthen luminous paint thinly and being able to make thickness of a coating layer thin (50 microns – 100 microns), a painted surface can be finished smoothly.

[0014] The condition of the luminous paint concerning this invention having been applied and having dried is shown in drawing 1.

[0015] In the luminous paint applied to this invention as shown in drawing 1, where the particle of the charge 3 of phosphorescent material is spread in homogeneity in the transparent and colorless clear coating layer 2, it will be arranged. Thus, in the luminous paint concerning this invention, since the surface area which has exposed the particle of the charge 3 of phosphorescent material in the coating layer 2 becomes remarkably large as compared with the former, as compared with the former, light storage effectiveness increases remarkably and can lengthen luminescence time amount remarkable.

[0016] Therefore, in the luminous paint concerning this invention, since the under coat by the white coating needed conventionally can be excluded, the color of a substrate can be checked by looking through the transparent and colorless clear coating layer 2. That is, if it becomes dark, the painted surface of a coated object can be made according to the luminous paint concerning this invention, to emit light with the luminescent color of the charge 3 of phosphorescent material in the bright condition, while being able to check the color and shank by looking also when coated objects are "variety entertainments" and "patterned cloth."

[0017] Hereafter, the example of the luminous paint concerning this invention is explained.

[0018] (Example 1) The ingredient first used by this example is explained.

Charge [-- RETAN PG thinner standard-form sedimentation inhibitor by Kansai Paint Co., Ltd. / -- AMAIDO system wax No/ by Nippon Oil & Fats Co., Ltd. / .5100 dispersant / -- Nippon Oil & Fats Co., Ltd. make [0019]] of phosphorescent material -- Thing transparent and colorless clear coating which fully subdivided PIKARIKO made from KEMITEKKU, Inc. (CP-05) with the pebbles ball mill machine, and was made into the shape of powder -- SOFUREKKUSU by Kansai Paint Co., Ltd. 5000 top clear curing agent -- SOFUREKKUSU by Kansai Paint Co., Ltd. 120 curing-agent thinner When thinner 6% was mixed with 9% of curing agents in 85% of transparent and colorless clear coatings using the above ingredient, a coating undiluted solution was created and weight of this coating undiluted solution was set to 100, the luminous paint which is mixed at a rate of 30–40 and is applied [weight / of 3 and a sedimentation inhibitor / weight / of 5 and the charge of phosphorescent material] to this invention in the weight of a dispersant was created.

Here, in this example, the mixed [dispersant] sedimentation inhibitor by Nippon Oil & Fats Co., Ltd. was used as a dispersant and a sedimentation inhibitor.

[0020] Since it will harden if the transparent and colorless clear coating used by this example is dried, the luminous paint concerning this example fits the paint of molding which consists of ingredients, such as plastics, a metal, and carbon.

[0021] (Example 2) The luminous paint which changes only a transparent and colorless clear coating into SOFUREKKUSU 300 by Kansai Paint Co., Ltd. among the ingredients used in the example 1, and is applied to this invention was created.

[0022] Since the luminous paint concerning this example has flexibility even if it dries, it can be used also for paint of the object for which the elastic ground and bending are needed.

[0023] (Example 3) The ingredient first used by this example is explained.

Charge [-- RETAN PG thinner standard form sedimentation inhibitor by Kansai Paint Co., Ltd. / -- AMAIDO system wax No/ by Nippon Oil & Fats Co., Ltd. /.5100 dispersant / -- Nippon Oil & Fats Co., Ltd. make [0024]] of phosphorescent material -- Thing transparent and colorless clear coating which fully subdivided PIKARIKO made from KEMITEKKU, Inc. (CP-05) with the pebbles ball mill machine, and was made into the shape of powder -- High urethane No[by Nippon Oil & Fats Co., Ltd.].5001 clear 41HF curing agent -- High urethane curing agent HF thinner by Nippon Oil & Fats Co., Ltd. When thinner 18% was mixed with 12% of curing agents in 70% of transparent and colorless clear coatings using the above ingredient, a coating undiluted solution was created and weight of this coating undiluted solution was set to 100, the luminous paint which is mixed at a rate of 30~40 and is applied [weight / of 3 and a sedimentation inhibitor / weight / of 5 and the charge of phosphorescent material] to this invention in the weight of a dispersant was created. Here, in this example, the mixed [dispersant] sedimentation inhibitor by Nippon Oil & Fats Co., Ltd. was used as a dispersant and a sedimentation inhibitor.

[0025] Since the luminous paint concerning this example has flexibility even if it dries, it can be used also for paint of an object of an urethane system and a vinyl chloride system, paper, etc. for which the elastic ground and bending are needed.

[0026] Each luminous paint concerning the example 1 explained above – an example 3 had long luminescence time amount [as opposed to the exposure of the light of the same time amount as compared with the conventional luminous paint applied on the under coat of the conventional luminous paint which used the same charge of phosphorescent material (PIKARIKO CPmade from KEMITEKKU, Inc.- 05), i.e., a white coating,].

[0027] In addition, the spray painting by the usual machine is possible for the luminous paint concerning the example 1 explained above – an example 3.

[0028] Thus, in the luminous paint concerning this invention, in the bright condition, such as daytime, the color and shank on the front face of a coated object can check by looking in the same condition as the condition before paint, and it has the description that a painted surface emits light, by dark conditions, such as Nighttime.

[0029] It applies to the front face of the fishing rod 10 as showed the luminous paint concerning this invention explained above to drawing 3 (a) and (b). Thus, when luminous paint is applied to the front face of a fishing rod 10, in the bright condition in the daytime, an ornament as shown in drawing 3 (a) given to the front face of a fishing rod 10 and (b) can be checked by looking without effect receptacle ***** of luminous paint. And if a perimeter becomes dark as it becomes night from twilight, the luminous paint applied to the front face of a fishing rod 10 will emit light, and the visibility of a fishing rod 10 will be raised.

[0030] Therefore, the user of a fishing rod 10 can check a fishing rod 10 by looking easily, even if a perimeter will be in the condition of darkness.

[0031] Moreover, when it applies to the front face of the float 20 as showed the luminous paint concerning this invention to drawing 4 (a) and (b), the high ornament of visibility as shown in drawing 4 (a) given to the front face of a float 20 and (b) can be checked by looking in the daytime, without being influenced of luminous paint. And if a perimeter becomes dark, the luminous paint applied to the front face of a float 20 will emit light, and the visibility of a float 20 will be raised.

[0032] Therefore, when the luminous paint concerning this invention is applied to a float,

regardless of day and night, it becomes a float with high visibility.

[0033] Thus, the luminous paint concerning this invention which has the description of emitting light if the color and shank on the front face of a coated object can be checked by looking in the bright condition and it becomes dark is suitable for paint of the following fishing tackle.

[0034] The guide 11 arranged by the fishing rod 10 as shown in drawing 3 (b).

[0035] The fishhook 30 as shown in drawing 5.

[0036] Drawing 6 (a) False food 40 as shown in – (c).

[0037] The weight 50 as shown in drawing 7 (a) and (b).

[0038] Drawing 8 (a) The balance 60 as shown in – (d).

[0039] The vinyl pipe 70 fixed to fishing lines, such as FUKASE fishing of CHINU, as shown in drawing 9.

[0040] The ball friend 80 as showed drawing 10.

[0041] The stringer 90 as shown in drawing 11.

[0042] Here, all the gestalten of fishing tackle shown in drawing 3 – drawing 11 are shown as an example of the kind of fishing tackle, and if they are the kind of fishing tackle, even if they are the things of what kind of gestalt, they can be painted with the luminous paint concerning this invention.

[0043] Furthermore, the luminous paint concerning this invention is not limited to the fishing tackle of the class shown in the example of drawing 3 – drawing 11, for example, can be painted even to what kind of a beam case, a beam receptacle, etc. of fishing tackle.

[0044]

[Effect of the Invention] As explained above, the ornament which was given to the front face in the bright condition according to this invention can be checked by looking, and the visibility of the fishing tackle can be raised by emitting light in darkness.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is a sectional view for explaining the condition of the painted surface of the luminous paint concerning this invention.

[Drawing 2] It is a sectional view for explaining the condition of the painted surface of conventional luminous paint.

[Drawing 3] It is the perspective view showing the configuration of a fishing rod.

[Drawing 4] It is the perspective view showing the configuration of a float.

[Drawing 5] It is the perspective view showing the configuration of a fishhook.

[Drawing 6] It is the perspective view showing the configuration of false food.

[Drawing 7] It is the perspective view showing the configuration of a weight.

[Drawing 8] It is the perspective view showing the configuration of the balance.

[Drawing 9] It is the perspective view showing the configuration of the vinyl pipe fixed to a fishing line.

[Drawing 10] It is the perspective view showing a ball friend's configuration.

[Drawing 11] It is the perspective view showing the configuration of a stringer.

[Description of Notations]

1 White Coating Layer

2 Transparent and Colorless Clear Coating Layer

3 Charge of Phosphorescent Material

10 Fishing Rod

11 Guide

20 Float

30 Fishhook

40 False Food

50 Weight

60 Balance

70 Vinyl Pipe

80 Ball Friend

90 Stringer

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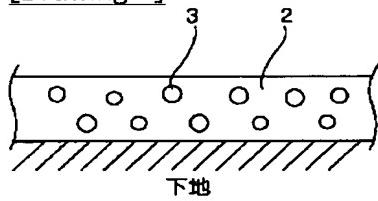
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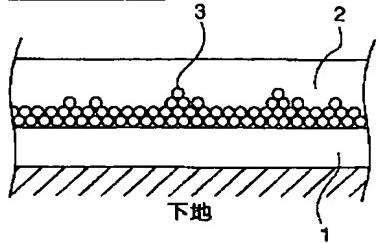
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DRAWINGS

[Drawing 1]



[Drawing 2]



[Drawing 3]